writes in part, "This variety is a find (for New Jersey). It is not included in any list I have seen of New Jersey mosses, although it may have been collected previously in that state. The plant is more common further south and was named and described from a specimen found in Georgia."

In the late afternoon Mr. V. L. Frazee arranged for us to visit a Mr. Lecompte who is related to Dr. Knieskern. We saw some of Knieskern's collections.

Attendance: 24. Leader: Mr. James Murphy.

## PROCEEDINGS OF THE CLUB

MINUTES OF THE MEETING OF NOVEMBER 2, 1942

The meeting was called to order at 8:25 p.m. by the President, Dr. C. Stuart Gager, at the Museum of Natural History. Thirtytwo members and friends were present.

The minutes of the preceding meeting were accepted as read.

The election of Mr. Mario G. Ferri, Departamento de Botanica, Faculdade de Fiolsofia, Ciencias e Letras, Caixa Postal 2926, Sao Paulo, Brasil, to annual membership was unanimously approved.

The suggestions proposed in the report of the Per Capita Cost Committee were read by Dr. Matzke in the absence of the chairman of the committee.

The scientific program of the evening was presented by Dr. Henry K. Svenson who spoke on the "Vegetation of Western South America." The talk was illustrated with Kodachrome slides which depicted the vegetation, peoples and points of interest in that region.

The meeting was adjourned at 9:35 p.m.

Respectfully submitted,

Honor M. Hollinghurst Recording Secretary

## MINUTES OF THE MEETING OF NOVEMBER 18, 1942

The meeting was called to order at 3:30 p.m. by the second Vice-president, Dr. Clyde Chandler in the Members Room of the

New York Botanical Garden Museum. Twenty-nine members and friends were present.

The minutes of the preceding meeting were accepted as read.

The first part of the scientific program was presented by Mrs. Annette Hervey who spoke on "The Use of *Phycomyces Blakes-leeanus* in the Assay of Thiamin in Agar." The talk was illustrated with slides.

The second portion of the program was presented by Mr. John D. Dodd who gave an illustrated talk on "Three Dimensional Cell Shape in the Carpel Vesicles of *Citrus Grandis*." The speaker's abstract follows:

Internal cells from the carpel vesicles (juice sacs) of grapefruit were examined in the living condition. Cell walls were stained lightly with neutral red. Records were kept by making a careful drawing of each cell. In order to insure completely impartial selection, the data were not tabulated and summarized until 100 cells had been drawn. Results showed an average of 13.85 faces per cell. The range in number of faces was from 9 to 18. The largest number of any one type was 22 cells each with 14 faces. Of the rest 39 cells had more than 14 faces and 39 had less. The number of edges per face varied from 3 to 8; 0.8% were triangular, 25.9% were quadrilateral; 41.6% were pentagonal; 23.6% were hexagonal; 7.0% were heptagonal and 1.1% were octagonal.

The meeting was adjourned at 4:30 p.m. and was followed by tea which was served by friends at the Garden.

Respectfully submitted,

Honor M. Hollinghurst Recording Secretary

MINUTES OF THE MEETING OF DECEMBER 1, 1942

The meeting was called to order at 8:25 p.m. by the President, Dr. C. Stuart Gager, in the Museum of Natural History. Thirtyfive members and friends were present.

The minutes of the preceding meeting were accepted as read.

The scientific program of the evening was presented by Mr. Otto Degener who gave an illustrated talk on "Botanizing in Fiji." The speaker's abstract follows:

While a member of the Pacific cruise of the palatial junk-yacht, "Cheng-Ho," sponsored by Mrs. Ann Archbold, collections were made, under the auspices of the Arnold Arboretum and the New York Botanical Garden, amounting to about 2,100 numbers or a total exceeding 15,000 specimens. These are being studied by Dr. A. C. Smith and various specialists. Thus far 64 novelties have been described, one proving to belong to an entirely new family related to the Magnoliaceae, Himantandraceae and Winteraceae. Mr. Degener, with the aid of his "adopted Figi son" Aloisio (Aloysius) Tabualewa, won the confidence of the Fijians who ordinarily do not look too kindly on the aggressive *papalangi* or white man, and lived with them in their elaborately constructed "grass" houses. This enabled him to collect data on their customs and how they used certain plants in their native medicine and arts. Their use, for example, of the latex of various species of *Alstonia*, as chewing gum, may help us solve the problem of soothing the nerves of countless ruminating stenographers, should our national supply of American chicle give out. Thirteen-year-old Leroy Peiler, a native Hawaiian refugee and Mr. Degener's ward, later served *yangona*, a beverage made from *Piper methysticum*, in proper Fiji style.

The meeting was adjourned at 9:30 p.m.

Respectfully submitted,

Honor M. Hollinghurst Recording Secretary

## MINUTES OF THE MEETING OF DECEMBER 16, 1942

The meeting of December 16 was held in Larkin Hall of Fordham University. Thirty-seven members and friends were present. Preceding the regular meeting, the members of the Torrey Botanical Club were invited to inspect the biological laboratories and to observe microscopic demonstrations. Refreshments were then served.

The meeting was called to order at 4:50 p.m. by the President, Dr. C. Stuart Gager, who introduced the first speaker, Father Berger of Fordham University. The topic presented by Father Berger and Miss Eleanor Witkus was "The Prophases of Polysomatic Mitosis and their Relation to Meiosis." The speakers' abstract follows:

The essentials of Darlington's precocity theory of meiosis, the singleness of leptotene chromonemata, the attraction in pairs only and the repulsion between pairs of pairs, and metaphase pairing due to chiasmata, were presented and refuted in the light of evidence brought forward by our spinach material and the work of other investigators.

In the periblem of the root tips of *Spinacia oleracea*, in addition to diploid cells with twelve chromosomes, tetraploid and octoploid cells are regularly

found. This condition of polyploidy arises by double chromosome reproduction during the resting stage. In the prophase and metaphase of certain of these polysomatic cells the chromosomes are in closely associated pairs.

In *Spinacia oleracea*, therefore, more than two chomonemata may be present in closely paired association. In such multiple associations there is no evidence of any repulsion between pairs. Paired associations are maintained from earliest prophase to metaphase without being held together by chiasmata.

After the discussion of these talks, Dr. Gager expressed the thanks of the Torrey Botanical Club to Father Berger and his staff for their kind hospitality. The meeting was adjourned at 5:45 p.m.

Respectfully submitted,

Honor M. Hollinghurst Recording Secretary

DATES OF PUBLICATION OF TORREYA, VOLUME 42

Number 1.January-FebruaryFebruary7, 19422.March-AprilApril 10, 19423.May-JuneJune 5, 19424.July-AugustNovember 12, 19425.September-OctoberJanuary 29, 19436.November-DecemberApril 24, 1943

## ERRATA

Page 56, line 6 from bottom: for nutalii, read Nuttallii.

Page 66, line 7 from bottom: for Dr. Wm. J. Crocker, read Dr. Wm. Crocker.

Page 73, line 4 from bottom: for datas, read data.

- Page 97, first new member listed: for Miss Marion Johnson, read Mr. Marion Johnson.
- Page 101, fourth new member listed: should be Professor Hempstead Castle, Yale University.

Page 126, bottom line: for Erythina, read Erythrina.

Page 129, for Rynchosphora, read Rynchospora.

for Scirpa, read Scirpus.

for Schleria, read Scleria.

Page 143, line 5: for Botrichium, read Botrychium.